## Neotypification of Roegneria caucasica, the Type of Roegneria (Poaceae, Triticeae)

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ABSTRACT. As part of a taxonomic revision of the genus *Roegneria*, K. Koch (Poaceae, Triticeae), a neotype is designated for *R. caucasica* K. Koch, the type of the generic name, because the entire type collection of Koch's specimens in Berlin (B) was destroyed during World War II.

Key words: Poaceae, Roegneria, Triticeae.

This paper results from the authors' revision of the genus *Roegneria* K. Koch (Poaceae, Triticeae). Most of the approximately 120 species of *Roegneria* were recently incorporated into a much larger genus, *Elymus* L. (Löve, 1984). The justification for the recognition of *Roegneria* as a genus separate and different from *Elymus* and related genera was demonstrated by morphological and numerical taxonomy (Baum et al., 1991, 1995) and on a cytogenetic basis (Jensen & Wang, 1991; Lu, 1993).

The genus *Roegneria* was published by K. Koch in August 1848 (Moore & Wood, 1965), with a single species, *R. caucasica* K. Koch. Koch traveled in the Caucasus and Central Asia in 1837–1838 and in 1843–1844. Koch's private herbarium was incorporated into the Berlin herbarium (B), in 1913 (Ulbrich, 1917). Koch's types, including that of *R. caucasica*, were destroyed in March 1943 during World War II. Unsuccessful inquiries were made to G, GOET, H, LE, MEL, MO, P, and W to locate specimens from the type gathering of *R. caucasica* based on Edmonson and Lack (1977). We thus engaged in a search for a neotype for *R. caucasica*.

Two alternatives were considered from the area of Daghestan near Kuba, where Koch's type was collected "Im Waldern Daghestans, besonders der Herrschafft Kuba ziemlich haüfig: 500–1000' hoch auf Kalk" (translation from the German: In woods of Daghestan, especially near Kuba, where it is abundant

500–1000 feet alt. on limestone). First, we found a collection made by Th. Alexeenko (Θ. Алексъенко) in 1898 from Daghestan (northern Caucasus, southwestern Russia), in approximately the same locality as that of the type. We examined duplicates of the collection in BM and K, but we were unable to check the specimen(s) in TB where the main Alexeenko collection is kept.

A second candidate for neotype was a collection of specimens of historical importance collected by Regel. This is the collection of Agropyron raegnerii Boissier (Boissier, 1884) examined by its author. This name is a synonym of Roegneria caucasica based on Boissier's examination of Koch's specimen (Boissier, 1884: 662). Koch's specimen was at the time in his own private collection. Boissier, contrary to the present International Code of Botanical Nomenclature, adopted the new epithet raegnerii for the species in Agropyron, even though the epithet caucasicum was then available in Agropyron, and thus created an illegitimate name because it was nomenclaturally superfluous when published (Art. 52, McNeill et al., 2006). Boissier based A. raegnerii not just on Koch's specimen of R. caucasica, but also on the type gathering of Triticum strigosum var. microcalyx Regel extant in duplicates in G-BOISS (the location of the specimen on which the illegitimate A. raegnerii [not shown] was based), as well as in K (Fig. 1), LE, P, and other herbaria.

Regel's collection is designated here as type for *Roegneria caucasica* with the neotype specimen in LE, whereas the duplicates at K (Fig. 1) and P are isoneotypes. Because the type of *Roegneria* is necessarily *R. caucasica* (the only species included by Koch when he described the genus), the neotype specimen of *R. caucasica* is also the neotype of the generic name *Roegneria*.

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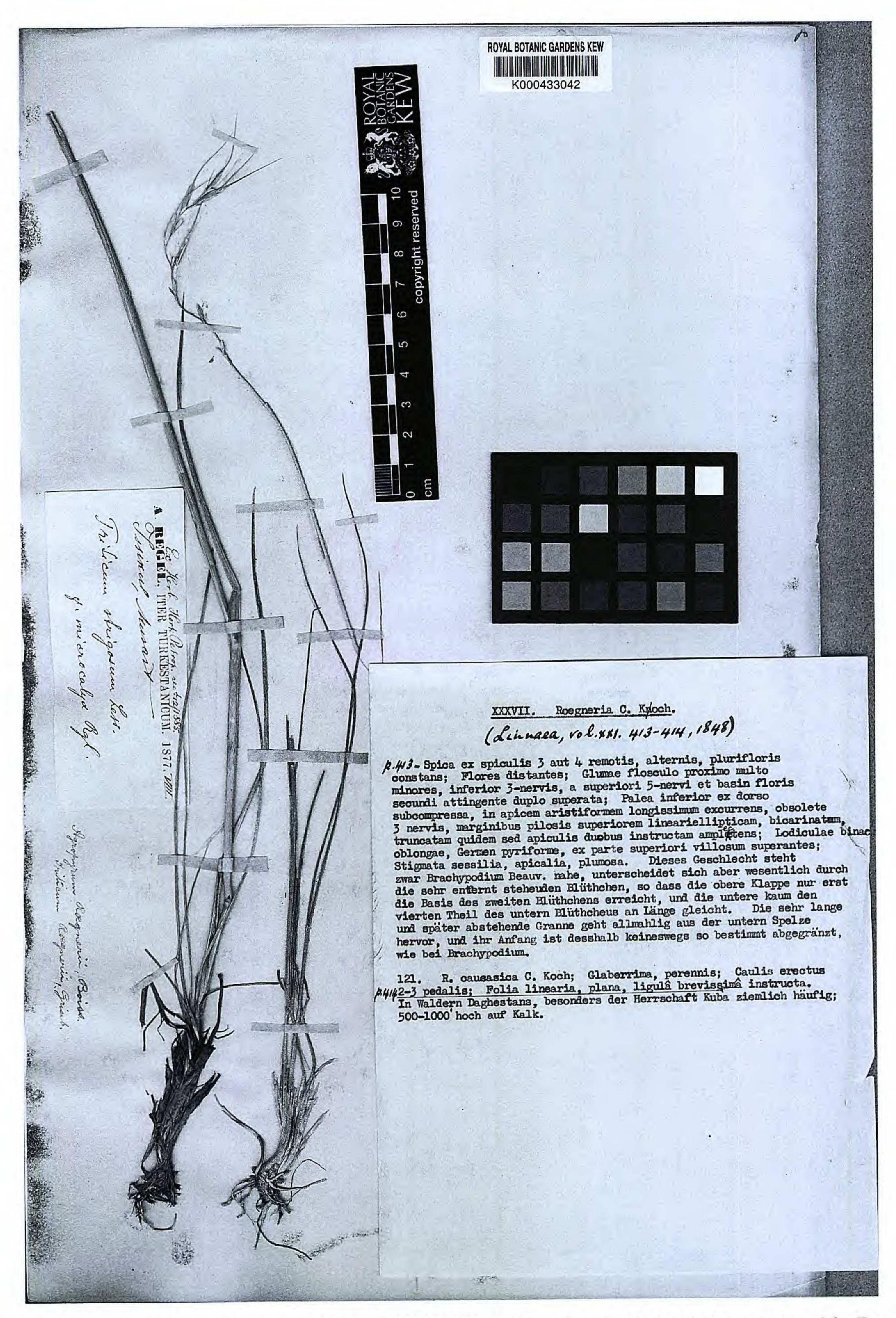


Figure 1. Isoneotype of *Roegneria caucasica* K. Koch (K000433042). Reproduced with the kind permission of the Trustees of the Royal Botanic Gardens, Kew.

- Roegneria K. Koch, Linnaea 21: 413. 1848. Agropyron raegnerii Boissier, Fl. Orient. 5: 662. 1884. TYPE: R. caucasica K. Koch.
- Roegneria caucasica K. Koch, Linnaea 21: 413. 1848. TYPE: Turkestan. "A. Regel Iter Turkestanicum Aug. 1877 VIII. Tssikul, Musast. *Triticum strigosum* Less. v. *microcalyx* Rgl.," A. Regel s.n. (neotype, designated here, LE not seen; duplicate of neotype, K000433042 photo). Figure 1.

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